

An Approach to Semantic Chemistry



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Chemantics - Overview

Chemantics – a OSTHUS Company

- German company with global presence
- Highly experienced in delivering R&D solutions and consulting expertise



Chemistry Tools in partnership with



Data integration Partner



Chemical Structures in R&D

eMolecules®

ZINC15



ChemSpider
The free chemical database

ChEMBL

SIGMA-ALDRICH

PubChem

The Chemantics Infrastructure integrates public and proprietary data across R&D domains based on chemical structures and reactions.

DrugCentral
Online drug Compendium

SureChem
THE NEW CHOICE FOR CHEMICAL PATENT SEARCH

PubMed

ChEBI

PerkinElmer

SPRINGER
NATURE

SpringerLink

DRUGBANK

hmdb
The Human Metabolome Database

BIOVIA

AKos

Consulting & Solutions GmbH

Overview

Competitive Intelligence
IP Capture
Patent Analysis

Commercial Compounds
Proprietary Compounds
Vendor Catalogs

Document Analytics
Scientific Publications
Proprietary Documents

Aggregated Data Sources
Domain Specific DBs
Reaction Databases

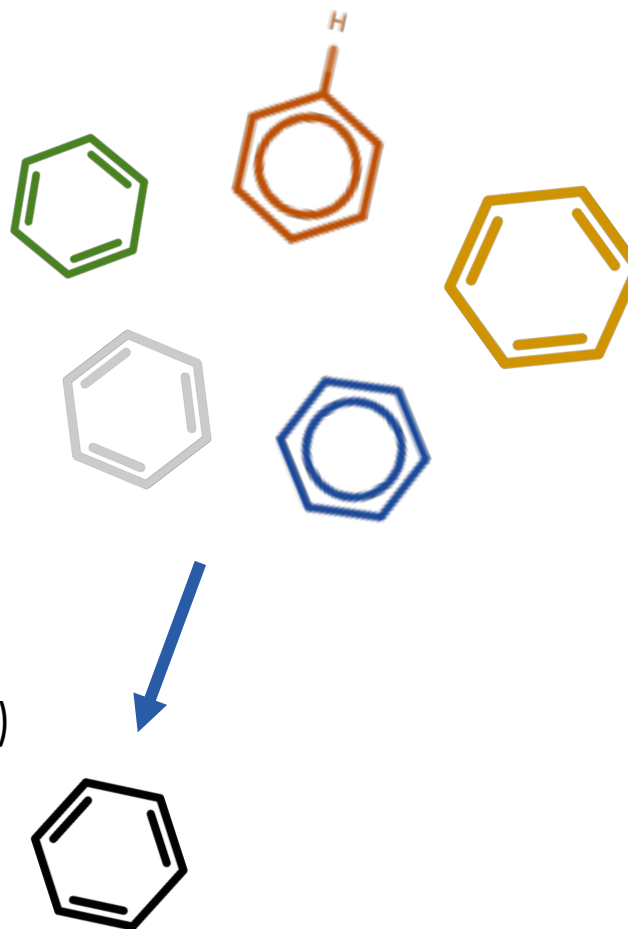
The Chemantic Process

Analysis

- Standardize
- Validate
- Annotate
- Build chemantic graph
- Prepare structure search

Key Features

- Data provenance
- 8 inferred chemical species
- Classification Ontology
(~600 features, functional groups, etc.)
- Sort Index
- Universal Resource Identifier



Process



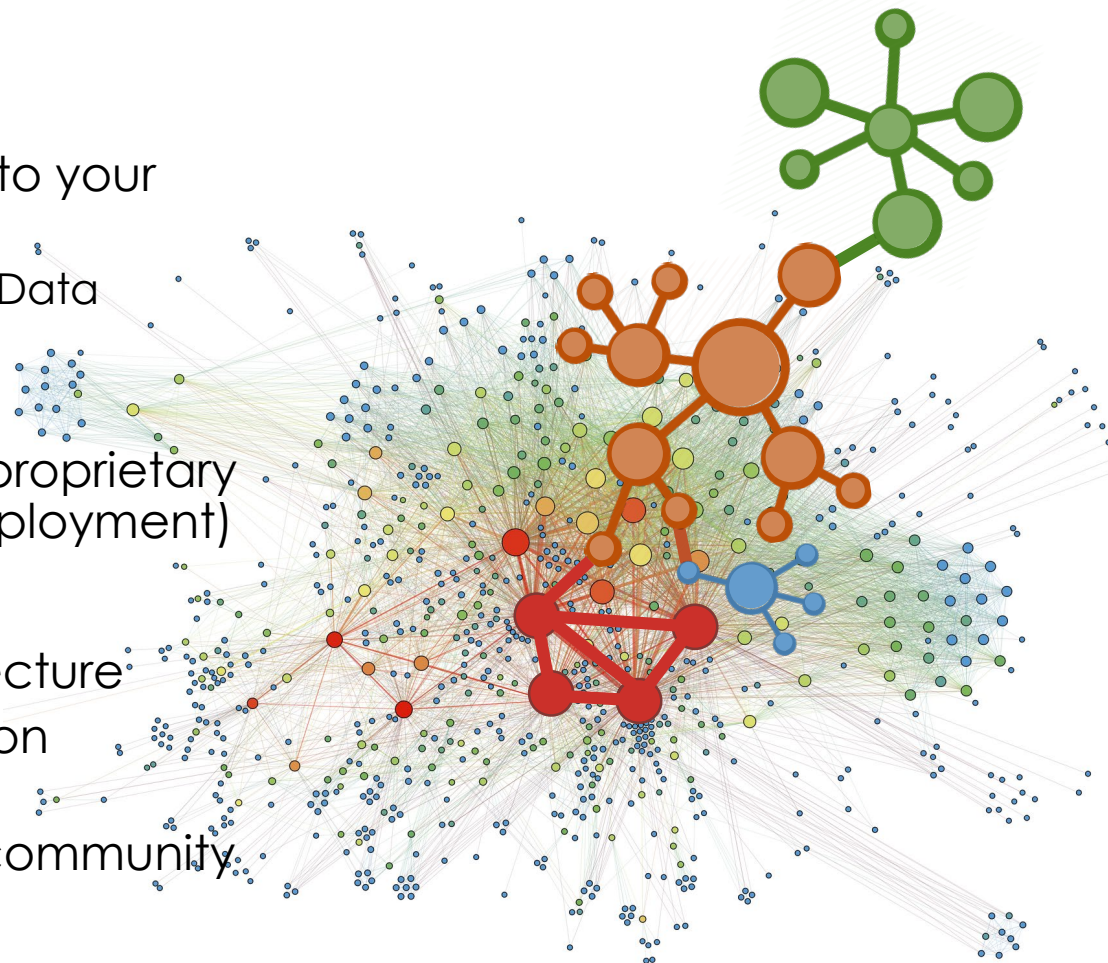
The Chemantic Process

Ingestion

- Integrate data set into your system of choice!
 - Reference Master Data
 - Semantic UI
 - Data Sharing
- Clear separation of proprietary and public data (deployment)

Key Features

- Rest Protocol Architecture
- Continuous integration capabilities
- Transparent to user community



Process



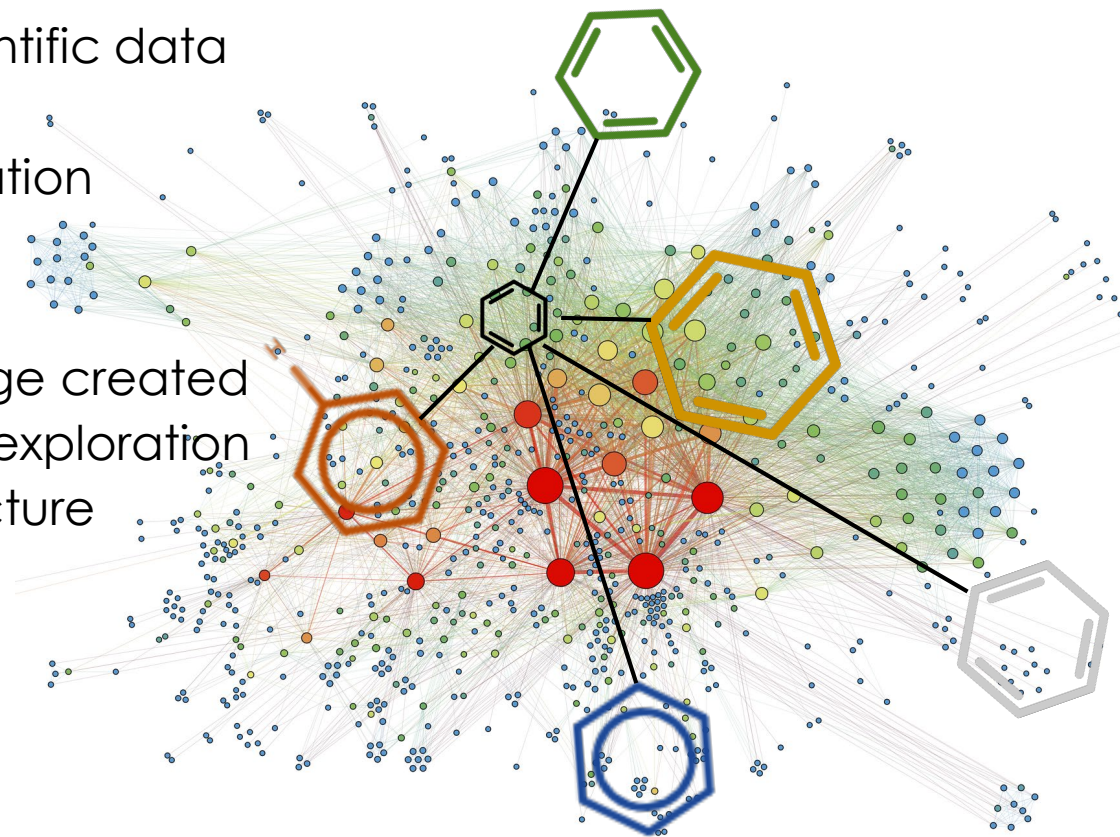
The Chemantic Process

Exploration

- Holistic view on scientific data
- Tool independent
- Feature and Annotation browsing

Key Features

- Additional knowledge created
- Cross domain data exploration
- 1 stop shop architecture



Process



Thank you!

